CITY OF SHORELINE

Planning & Community Development

Traffic Study Guidelines

Any development proposal that would generate 20 vehicle trips[1] during the p.m. peak hour is required to submit a traffic study. Traffic studies may also be required for other projects. The amount of detail to be included in the traffic study depends on the complexity of the proposed project. This will be determined at a pre-application meeting based on the following table:

	Type of Study Required			
	Programmatic Traffic Assessment	**Traffic Impact Assessment**	**Traffic Impact Statement**	**Regional Traffic Analysis**
	(for Comp. Plan Amendments and some Rezones)	(a less elaborate study for smaller projects)	(a traditional traffic study)	(a comprehensive evaluation of long-term impacts)
Threshold	proposal differs from Comp. Plan EIS analysis	20 – 99 Peak Hour Trips	100 – 500 Peak Hour Trips	More than 500 Peak Hour Trips
Study Area	depends on size of site and proposal	typically just site access points and adj. intersections	site access points and nearby intersections	large area encompassing many streets and intersections
MUST BE PREPARED BY A LICENSED ENGINEER	◈	◈	√	√
IMPACT ANALYSIS				
Existing Conditions	◈	√	√	√
Traffic Projections (these are further explained on the reverse side of this sheet)	compare existing with typical for proposal	compare existing with proposed	with phases, if appropriate	with phases, if appropriate
• Project Based		√	√	√
• Background Traffic Growth	◈	◈	√	√
• Other developments	◈	◈	√	√
SITE EVALUATION				
Sight Distance Analysis	√	√	√	√
Access Point Analysis	◈	√	√	√
Access design, vehicle queuing		√	√	√
Pedestrian Access	◈	√	√	√
Internal vehicle and Pedestrian Circulation and design	◈	◈	√	√
Identify potential mitigation	◈	√	√	√
OTHER ANALYSES				
Accident History			◈	◈
Gap Analysis for unsignalized intersections		◈	◈	◈
Transp. network model analysis	◈		◈	√
Special Site Considerations	◈	◈	◈	◈
RECOMMENDATIONS/CONCLUSIONS				
Summary of future conditions	◈	√	√	√
Summary of access/circulation		◈	√	√
Mitigation Recommendations	◈	√	√	√
TDM Mitigation Measures			◈	√
Key: √ = required ◈ = case-by-case				

[1] The estimate of vehicle trips shall be conducted in accordance with the most recent version of Trip Generation Manual, published by the Institute of Traffic Engineers.

Business Hours: M – F 8:00 a.m. to 5 p.m. ♦ Permit Processing Hours: M – F 8 a.m. to 4:00 p.m.

Note: This handout is for informational use only and is not to be substituted for the Shoreline Development Code. 2/2014

The following outline should be used to prepare traffic studies. Include information as determined by the matrix on the previous page. Two copies are required.

Cover Page

- Applicant
- Project Title
- Project Address
- Preparer's Contact Information, Signature, and Professional Engineer stamp, if required

Introduction

- Complete Project Description
  - Current & Proposed Zoning, Comprehensive Plan Designation
  - Proposed Land Use(s)
  - Size of Development – Size of project site, number and type of housing units, gross floor area and type of non-residential uses
  - Phasing Plan – Major Project Milestones (for complex projects)
- Project Location and Study Area Boundary
- Concise Summary of Findings (if appropriate)

Impact Analysis

- Existing Conditions
  - Description of Critical Intersections and Roadways
  - Selection of Analysis Periods (use p.m. peak, as well as any other appropriate peak traffic period, such as school times, church usage, etc.)
  - Identify City Capital Projects located in the study area
  - Identification of existing volumes – use traffic counts no older than two years
  - Existing Level of Service at intersections in the study area; identify existing deficiencies/needs
  - Description of other travel modes serving the project location – sidewalks, trails, transit
- Traffic Projections – Trip Generation and Distribution
  Include analysis that is directly related to the proposed project, addresses the growth of background traffic, and Traffic Impact Statements of other developments in the study area that have been applied for but have not been completed.
  - Trip Generation – Refer to the most recent edition of Trip Generation published by the Institute of Traffic Engineers
  - Trip Distribution
    Can be determined by:
    - Existing Characteristics, if proposal is consistent with neighboring surroundings
    - Origin/Destination Studies
    - Trip Distribution Models
    - Market Studies

Site Evaluation

- Sight Distance and Access Point Analysis
- Access design and vehicle queuing
- Pedestrian Access (from the public right-of-way and from adjacent developments to all principal entrances)
- Internal Vehicle & Pedestrian Circulation, Parking Design
- Identify potential mitigations (physical solutions as well as transportation demand management)

Recommendations/Conclusions

- Summary of future traffic volumes, LOS, and proposed improvements
- Summary of on-site access, circulation, design
- Description of recommended mitigations
- Description of proposed traffic demand management strategies

Note: This handout is provided as an aid and is for informational use only. It is not a substitute for the Shoreline Municipal Code or the Shoreline Development Code.

Subtract Existing Uses That Are Not Proposed to Continue

Land Use Type	Unit of Measure	How much/many exist now	How much/many are proposed	Increase or Decrease (Net New)	PM Trips per unit (TPU)	New Trips (Net New * TPU)
Residential/Multi-Family						
Single Family House	DUs				1.01	
Small Apartment Buildings/Duplex/ADU	DUs				0.62	
Mid-Rise Apartment (3-9 Floors)	DUs				0.39	
Townhouse/Single Family Attached	DUs				0.55	
Mobile Home Park	DUs				0.56	
Non-Residential						
General Retail	1,000 SF				4.93	
General Office (less than 10,000 SF)	1,000 SF				3.40	
General Office (10,000 – 25,000 SF)	1,000 SF				2.68	
Medical/Dental/Vet Office	1,000 SF				4.08	
Fast Food Restaurant –no Drive Thru	1,000 SF				40.09	
Fast Food with Drive Thru[2]	1,000 SF				36.56	
Sit-Down Restaurant	1,000 SF				12.92	
Automobile Sales	1,000 SF				2.62	
Automobile Service/Repair	1,000 SF				2.87	
Casino	1,000 SF				17.26	
Hotel/Motel	Rooms				0.60	
Warehouse	1,000 SF				0.74	
Mini-Warehouse	1,000 SF				0.26	
Church	1,000 SF				0.72	
Elementary/Middle School	1,000 SF				0.28	
High School	1,000 SF				1.94	
College	Students				0.23	
Libraries	1,000 SF				4.74	
Government Offices	1,000 SF				3.40	
Research and Development (Public Health Lab)	1,000 SF				1.07	
TOTAL NEW PM TRIPS						

Notes: Land Use Types not listed below may be found in the most recent edition of the Institute of Transportation Engineers – Trip Generation Manual.
Parking Lot or Garage with 20 or more spaces will require a Parking Utilization Study to determine if a Traffic Study is required.
City Parks produce negligible PM Peak Trips and would only require a traffic study if additional uses are proposed or due to site specific concerns.

DUs = Dwelling Units

SF = Square Feet

[2] Espresso/Coffee Only – No Traffic Study Required unless site specific concerns are raised.